



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,779	03/09/2001	Atsushi Misawa	Q63489	5542
7590	03/09/2005		EXAMINER	
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 PENNSYLVANIA AVENUE, N.W. WASHINGTON, DC 20037-3213			JELINEK, BRIAN J	
			ART UNIT	PAPER NUMBER
			2615	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/801,779	MISAWA, ATSUSHI
	Examiner Brian Jelinek	Art Unit 2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-32 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-8,13,14 and 16-32 is/are rejected.
 7) Claim(s) 9-12 and 15 is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

Response to Amendment

The Examiner respectfully submits a response to the amendment received on 10/19/2005 of application no. 09/801,779 filed on 3/9/2001 in which claims 1-32 are presented for examination.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Arguments

The Applicant's arguments have been fully considered but they are not persuasive. Please refer to the following office action, which clearly sets forth the reasons for non-persuasiveness.

Regarding claim independent claims 1, 14, and 21, the Applicant argues that Swayze fails to disclose the lens barrier comprises a portion of the body in a case that the lens barrier covers the lens section and in a case that the lens barrier opens the lens section. However, Swayze clearly shows that the lens barrier comprises a portion of the body in a case that the lens barrier covers the lens section (Fig. 2) and in a case

that the lens barrier opens the lens section (Fig. 4). Although the Applicant correctly states that the lens barrier is extended from the body when the lens is uncovered (pg. 12), Swayze discloses a stop means limiting the opening of the lens barriers (Fig. 4; col. 2, lines 42-52). As a result, when the lens barriers remain part of the body in the open position, and both expose the lens and enclose portions of the camera body.

Regarding claims 21-23, the Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-7, 13, 20-24, 26-27, 29-30, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Swayze (U.S. Pat. No. 5,115,265).

Regarding claim 1, Swayze shows an image capturing apparatus, comprising: a body having a front face, a back face, and a side face provided between a front face and a back face (Fig. 1); a lens section, provided on a body, operable to form an image (Fig. 1, element 19; col. 2, line 20); and a lens barrier operable to cover a front face, a back face and a side face of a body (Fig. 1, elements 3 and 5) and to pivotally move around an axis substantially parallel to an optical axis of a lens section (Fig. 1, elements 23 and 31); wherein said lens barrier comprises a portion of said body in a case that

said lens barrier covers said lens section (Fig. 2) and in a case that said lens barrier opens said lens section (Fig. 4).

Regarding claim 2, Swayze teaches a lens barrier has a grip for a hand of a user to be placed during image capturing (Fig. 1, element 39 and 41; col. 2, lines 42-45).

Regarding claim 3, Swayze teaches a lens barrier pivotally moves around an axis generally proximate to a center of a body and is capable of stopping on a right side or a left side of a body (Fig. 1, elements 23 and 31; Fig. 4).

Regarding claim 5, Swayze teaches a body includes an arc-shaped portion, and a lens barrier pivotally moves along the arc-shaped portion (Fig. 1).

Regarding claim 6, Swayze teaches a body is arranged to have a substantially cylindrical shape in which a front face and a back face are circular (Fig. 1).

Regarding claim 7, Swayze teaches a lens barrier pivotally moves around an axis generally proximate to a center of a body and is capable of stopping on a right side or a left side of a body (see 102 rejection of claim 3).

Regarding claims 13, Swayze shows a lens barrier is removable from a body (Fig. 1, elements 29 and 37; col. 2, lines 26 and 31).

Regarding claim 20, Swayze shows a body has an outer periphery, and wherein an axis of a lens barrier is positioned at an outer periphery of the body (Fig. 1; Fig. 1, elements 23 and 31).

Regarding claim 21, Swayze discloses an image capturing apparatus, comprising: a body having a front face, a back face and a side face provided between said front face and said back face (Fig. 1); an image forming lens section provided on

said body, said image forming lens section having an optical axis (Fig. 1, element 19; col. 2, line 20); and a cover member having a first section, a second section and a third section arranged to face said front face, said back face and said side face of said body (Fig. 1, elements 3 and 5), respectively, said cover member being supported by said body on an axis extending substantially in parallel with said optical axis of said image forming lens section (Fig. 1, elements 23 and 31); wherein said cover member comprises a portion of said body in a case that said cover member covers said image forming lens section (Fig. 2) and in a case that said cover member opens said image forming lens section (Fig. 4).

Regarding claim 22, Swayze discloses the second section of said cover member includes an arc-shaped portion (Fig. 1).

Regarding claim 23, Swayze discloses the body has an outer periphery, and wherein said axis of said cover is positioned at said outer periphery of said body (Fig. 1; Fig. 1, elements 23 and 31).

Regarding claim 24, Swayze discloses an image capturing apparatus, comprising: a body having a front face, a back face, and a side face provided between said front face and said back face (Fig. 1); a lens section, provided on said body, operable to form an image (Fig. 1, element 19; col. 2, line 20); a lens barrier operable to cover said front face, said back face and said side face of said body (Fig. 1, elements 3 and 5) and to pivotally move around an axis substantially parallel to an optical axis of said lens section (Fig. 1, elements 23 and 31); and a lens barrier attachment disposed

Art Unit: 2615

at or near a center of said body for allowing said lens barrier to pivotally move around said axis (Fig. 1, elements 23 and 31).

Regarding claim 26, Swayze discloses an image capturing apparatus, comprising: a body having a front face, a back face and a side face provided between said front face and said back face (Fig. 1); an image forming lens section provided on said body, said image forming lens section having an optical axis (Fig. 1, element 19; col. 2, line 20); a cover member having a first section, a second section and a third section arranged to face said front face, said back face and said side face of said body, respectively (Fig. 1, elements 3 and 5), said cover member being supported by said body on an axis extending substantially in parallel with said optical axis of said image forming lens section (Fig. 1, elements 23 and 31); and a cover member attachment disposed at or near a center of said body for allowing said cover member to pivotally move around said axis (Fig. 1, elements 23 and 31).

Regarding claim 27, Swayze discloses the image capturing apparatus of claim 1, wherein said lens barrier maintains a non-protruding disposition relative to said body in the case that said lens barrier covers said lens section and in the case that said lens barrier opens said lens section (Figs. 2 and 4) because the lens barrier remains in the same plane as the camera body regardless of its position.

Regarding claim 29, Swayze discloses the cover member maintains a non-protruding disposition relative to said body in the case that said cover member covers said image forming lens section and in the case that said cover member opens said

image forming lens section (Figs. 2 and 4) because the lens cover remains in the same plane as the camera body regardless of its position.

Regarding claim 30, Swayze discloses the lens barrier maintains a non-protruding disposition relative to said body in the case that said lens barrier covers said lens section and in the case that said lens barrier opens said lens section (Figs. 2 and 4) because the lens barrier remains in the same plane as the camera body regardless of its position.

Regarding claim 32, Swayze discloses the cover member maintains a non-protruding disposition relative to said body in the case that said cover member covers said image forming lens section and in the case that said cover member opens said image forming lens section (Figs. 2 and 4) because the lens cover remains in the same plane as the camera body regardless of its position.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swayze (U.S. Pat. No. 5,115,265) in view of Toyofuku (U.S. Pat. No. 6,166,765).

Regarding claim 4, Swayze shows a camera with a lens barrier capable of being moved to a closed position covering a lens (Fig. 2); and also to an open position exposing a lens when the lens barrier is stopped on a right side and a left side of a body (Fig.4). Swayze does not teach that a camera mode can be switched on the basis of the position of the lens barrier.

Toyofuku teaches providing a switch to responsive to an open or closed position of a lens barrier (col. 3, lines 44-48; Fig. 1, element 52 and 65). Furthermore, Toyofuku teaches the switch is capable of selecting a mode to change a first operation mode (col. 3, lines 51-60) to a second operation mode (col. 3, line 61-col.4, line 4) in accordance with a position of a lens barrier, the operation modes include at least a capture mode in which a lens section is exposed (col. 3, lines 51-60) and a non-capture mode in which a lens section is covered by a lens barrier (col. 3, line 61-col.4, line 4).

It is clear that providing the barrier switch of Toyofuku would improve the image capturing apparatus of Swayze by automatically switching a photographing mode, thus making the apparatus more user-friendly by eliminating the need for a user to manually select a photographing mode (col. 1, lines 21-40). One of ordinary skill in the art would have provided the barrier switch of Toyofuku in order to automate basic imaging apparatus functions. As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the barrier switch of Toyofuku with the imaging apparatus of Swayze for the purpose of automating basic imaging apparatus functions, and making the imaging apparatus more user-friendly by eliminating the need for a user to manually select a photographing mode.

Regarding claim 8, please see the 102 rejections of claims 1, 3, and 5; and the 103 rejection of claim 4.

Claim 14, 16-17, 19, 25, 28, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swayze (U.S. Pat. No. 5,115,265) in view of Herzfeld (U.S. Pat. No. 2,725,804).

Regarding claim 14, Swayze teaches an image capturing apparatus, comprising: a body having a front face and a back face, a side face provided between the front face and the back face (Fig. 1); first and second lens barriers, provided on the body (Fig. 1, elements 3 and 5) wherein first and second lens barriers cover at least parts of the front face, the back face and the side face (Fig. 2), and are pivotally movable, independently of each other, around corresponding axes which are substantially parallel to respective optical axes (Fig. 1, elements 23 and 31) of a lens; wherein said first and second lens barriers comprise first and second portions, respectively, of said body in a case that said first and second lens barriers cover said lens (Fig. 2), respectively, and in a case that said first and second lens barriers open said lens, respectively (Fig. 4). Swayze does not teach a first and second lens sections.

However, Herzfeld teaches an image capturing apparatus comprising a first and second lens sections (Fig. 1) for stereo image capture. One skilled in the art would have provided a mono imaging apparatus with multiple lenses in order to record simultaneous images capable of being combined into a three dimensional image. As a result, it would have been obvious to one of ordinary skill in the art at the time of the

invention to have provided the mono image capturing apparatus of Swayze with the first and second lenses of Herzfeld in order to allow stereo image capture of a scene in three dimensions.

Regarding claim 16, Swayze does not teach a first and second lens sections are operable to capture two images simultaneously, an image capturing apparatus has operation modes including at least a single-image capture mode, in which only one image is captured, and a double-image capture mode in which two images are simultaneously captured, and the single-image capture mode is set when only the first lens section is exposed and the double-image capture mode is set when both the first and second lens sections are exposed.

Herzfeld teaches a first and second lens sections (Fig. 1, elements 20 and 22), are operable to capture two images simultaneously, an image capturing apparatus has operation modes including at least a single-image capture mode, in which only one image is captured, and a double-image capture mode in which two images are simultaneously captured, and the single-image capture mode is set when only the first lens section is exposed and the double-image capture mode is set when both the first and second lens sections are exposed (col. 1, lines 15-28; col. 2, lines 61-66).

Regarding claim 17, Swayze does not teach a first and second lens sections are operable to capture a stereoscopic image in the double-image capture mode.

Herzfeld teaches a first and second lens sections are operable to capture a stereoscopic image in a double-image capture mode (col. 2, lines 61-66).

Regarding claim 19, Swayze shows a first and second lens barriers are removable from a body (Fig. 1, elements 29 and 37; col. 2, lines 26 and 31).

Regarding claim 25, Swayze discloses an image capturing apparatus, comprising: a body having a front face and a back face, a side face provided between said front face and said back face (Fig. 1); first and second lens sections, provided on said body, each operable to converge an image (Fig. 1, elements 3 and 5); first and second lens barriers, provided on said body, operable to protect said first and second lens sections, respectively (Fig. 2); and first and second lens barrier attachments disposed at or near a center of said body for allowing said first and second lens barriers to pivotally move around said axis (Fig. 1, elements 23 and 31); and said first and second lens barriers cover at least parts of said front face, said back face and said side face, and are pivotally movable, independently of each other, around corresponding axes which are substantially parallel to respective optical axes of the lens to protect the lens (Figs. 2 and 4). Swayze does not teach a first and second lens.

However, Herzfeld teaches an image capturing apparatus comprising a first and second lens sections (Fig. 1) for stereo image capture. One skilled in the art would have provided a mono imaging apparatus with multiple lenses in order to record simultaneous images capable of being combined into a three dimensional image. As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the mono image capturing apparatus of Swayze with the first and second lenses of Herzfeld in order to allow stereo image capture of a scene in three dimensions.

Regarding claim 28, Swayze discloses the first and second lens barriers maintain a non-protruding disposition relative to said body in the case that said first and second lens barriers cover said first and second lens sections, respectively, and in the case that said first and second lens barriers open said first and second lens sections, respectively (Figs. 2 and 4) because the lens barriers remain in the same plane as the camera body regardless of its position.

Regarding claim 31, Swayze discloses the first and second lens barriers maintain a non-protruding disposition relative to said body in the case that said first and second lens barriers cover said first and second lens sections, respectively, and in the case that said first and second lens barriers open said first and second lens sections, respectively (Figs. 2 and 4) because the lens barriers remain in the same plane as the camera body regardless of its position.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swayze (U.S. Pat. No. 5,115,265), in view of Herzfeld (U.S. Pat. No. 2,725,804), and further in view of Palm et al. (U.S. Pat. No. 6,414,709).

Regarding claim 18, neither Swayze nor Herzfeld teach a first and second lens sections are capable of capturing images with different zooming power.

However, Palm et al. teaches a first and second lens sections are operable to capture two images with different zooming power in a double-image capture mode (col. 8, lines 6-23). It is extremely well known in the art to provide a 2-D camera with a zoom lens. It is clear that providing the stereo camera of Herzfeld with the zooming means of

Palm et al. would improve the camera by allowing a user to image distant objects more closely. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to configure the stereo camera of Herzfeld with the zooming capability of Palm et al. to allow a user to take close-up images of far away objects.

Allowable Subject Matter

Claims 9-12, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 9, the reason for allowance is as follows: the prior art does not disclose or fairly suggest a lens barrier including legs provided on a face thereof covering a side face of a body, and legs support an image capturing apparatus when legs are positioned on a bottom side of the body.

Claims 10 and 11 depend from claim 9.

Regarding claim 12, the reason for allowance is as follows: the prior art does not disclose or fairly suggest a lens barrier includes an opening operable to expose a connection part operable to connect an image capturing apparatus to external equipment.

Regarding claim 15, the reason for allowance is as follows: the prior art does not disclose or fairly suggest an image capturing apparatus wherein a front face and a back face of a body have generally heart-like shapes.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Jelinek whose telephone number is (703) 305-4724 until 3/2/2005, and (571)272-7366 thereafter. The examiner can normally be reached on M-F 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, the examiner's acting supervisor, Thai Tran can be reached at (703) 305-4725. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian Jelinek
3/5/2005



TUAN HO
PRIMARY EXAMINER